

CalRECYCLE

News from the California Integrated Waste Management Board

fall 2009



The California Integrated Waste Management Board is the state's leading authority on recycling and waste reduction. It promotes reducing waste whenever possible, managing all materials to their highest and best use, and protecting public health and safety and the environment.

Major changes ahead

The California Integrated Waste Management Board will be eliminated as of January 1, 2010, but nearly all of its authority and resources will transfer to a new recycling department. [*Read more...*](#)

Discarding less

State's new waste measurement formula shows continued progress by California jurisdictions toward California's zero waste goal.

[*Read more...*](#)

New waste technologies on horizon

Conversion technologies, processes for converting municipal solid waste into energy, are aiding California's battle against global warming. [*Read more...*](#)

Commercial recycling

Rulemaking under way for upcoming mandatory commercial and multifamily recycling program in California. [*Read more...*](#)

Recycling success story

The City of San Jose has become a national leader with its recycling program for multifamily housing. [*Read more...*](#)

Transition to DTV

The summer switchover from analog to digital television signals did not send a wave of older television sets to recycle bins. [*Read more...*](#)

Curriculum review

The Education and the Environment Initiative moves closer to bringing comprehensive environmental instruction to California classrooms. [*Read more...*](#)

Don't throw it away

A global product reuse network gains millions of new devotees thanks to a two-year support program from the California Integrated Waste Management Board. [*Read more...*](#)



New Recycling Department Created

The California Integrated Waste Management Board is set to be eliminated on January 1, 2010.

Senate Bill 63 (Strickland), signed by the Governor on July 28, eliminates the Board and conveys nearly all of its existing statutory authorities and resources to a new Department of Resources Recycling and Recovery, which is created in the Natural Resources Agency. The State's recycling programs will be consolidated by moving the Division of Recycling, which administers the bottle and can program, from the Department of Conservation to the new recycling department as well.

The bill transfers the Board's Office of Education and Environment to the California Environmental Protection Agency (Cal/EPA).

The Governor will appoint a Director of Resources Recycling and Recovery to administer the new department.

Planning for the reorganization has begun and news about our progress in combining these programs will be posted to the Board's website. Watch for updates at www.ciwmb.ca.gov.



New Waste Measurement System Already Reporting Encouraging News

California adopted a new formula last year for determining annual solid waste disposal rates (SB 1016, authored by former Board Member and now-Senator Pat Wiggins), and promised the new process would result in faster, streamlined calculations.

That new formula is already paying dividends.

In August, Integrated Waste Management Board staff was able to calculate the 2008 statewide waste disposal rate, shaving about a year off the timeline that had been needed to make the same calculation using the old waste diversion formula in prior years.

The bottom line: The statewide diversion rate equivalent rose to 59 percent, keeping California at the forefront of converting trash into cash by diverting solid waste away from landfills and into higher-valued products. (Using the old measurement formula, California's waste diversion rate was calculated at a nation's best 58 percent for 2007.)

The per-resident disposal rate was calculated at 5.1 pounds per person per day during 2008, the lowest since detailed solid waste disposal tracking began back in 1995.

The 2008 number represents a significant drop from 2005, when per-resident waste disposal was calculated at 6.3 pounds per person per day.

The state's economic downturn is believed to have been a significant factor in sending less solid waste to California landfills, but local waste diversion programs also have played a major role in the effort to find new and better uses for our daily discards.

News of the 2008 waste numbers comes with a cautionary note, however: Some local jurisdictions may face challenges in maintaining their current waste diversion programs, given the economic downturn and budget shortages, and future waste disposal rates could climb if local diversion programs are not in place if or when the economy stages a rapid rebound.

In an August memo to Board Members, Board staff warned that the statewide waste diversion rate equivalent could drop by as much as 5 percentage points under that kind of worst-case scenario. "Even though times are very tough, now is the time to plan for the diversion programs that will be needed when the recovery comes," the memo states.



Conversion Technology Projects Advancing

Europe and Japan have led the way in use of conversion technologies—processes for converting municipal solid waste into energy—and California is on the verge of making it a major tool in the battle against climate change.

Conversion technologies provide a source of clean energy and new materials such as biofuels, chemical feedstocks or plastics, while reducing the flow of organic materials into landfills where the products decompose and generate methane, a potent greenhouse gas.

After years of study and pilot projects involving a variety of technologies, several major conversion technology projects have been approved, or may soon be approved, across California. Here's a brief status of some current projects in the state:

San Jose—The City Council voted in June 2009 to negotiate an MOU with Zero Waste Energy Development Co., LLC to lease city-owned land to build and operate an organics-to-energy biogas facility near the city's wastewater treatment plant and the material processing/recycling facilities owned in part by Zero Waste. This organics-to-energy facility will be the first of its kind in the nation to use dry fermentation anaerobic digestion to recover energy from the organic portion of the municipal solid waste stream. The San Jose facility will ultimately process 150,000 tons of organic waste annually and is slated to be operational in late 2010.

City of Los Angeles—City leaders have approved a 20-year plan to move toward ending reliance on landfills, including a goal of siting and building conversion technology facilities within the next five years to divert as much as 75-85 percent of solid waste not already being recycled.

County of Los Angeles—County officials were expected to finalize a decision this summer to move forward on conversion technology facilities at four major material recovery facilities serving the nation's most populous county.

Santa Barbara County—A decision is expected soon by a task force analyzing eight vendors/systems for a conversion technology project at the Tajiguas Landfill in Goleta.

Salinas Valley Solid Waste Authority—This regional waste agency has selected three firms to develop a large conversion technology project at the Johnson Canyon Resource Recovery Park near Gonzales. Authority members have ranked the top three vendors, and agency staff will be negotiating an agreement.

The California Integrated Waste Management Board maintains a website that includes a wealth of information and material about conversion technologies. For additional information, contact Jacques Franco at (916) 341-6608 or at jfranco@ciwmb.ca.gov.



Commercial, Multifamily Recycling Proposals Advance

Integrated Waste Management Board staff hosted two stakeholder workshops this summer as the rulemaking process draws closer for a mandatory commercial and multifamily recycling program, which is proposed to take effect by January 1, 2012.

Mandatory commercial recycling was one of the strategies included in the AB 32 Scoping Plan by the Air Resources Board, and is expected to result in annual reduction equivalents of at least 5 million metric tons of carbon dioxide.

Past studies have found a vast untapped amount of potentially recyclable materials—an estimated 10 million tons annually—from California businesses with 100 or more employees (representing about 12 percent of the estimated 2 million commercial businesses in the state), as well as mobile home parks and multifamily housing complexes with five or more units.

Slightly more than half of that 10 million tons is cardboard, lumber, glass, plastic, paper, and metals. Recycling just half of that amount would provide the desired greenhouse gas emission reductions outlined in the AB 32 Scoping Plan.

The environmental benefits would be even greater if the recycling program, which is now being reviewed by Board staff, ultimately requires the commercial sector to recycle food waste.

More than 3.5 million tons of food waste is sent to landfills annually by the commercial sector, and recycling just half of that amount would reduce annual greenhouse gas emissions by as much as 2 million metric tons in carbon dioxide equivalents.



Multi-Family Recycling Program: San Jose Sets Example

Since July 2008, waste from multifamily complexes has been delivered to a new, state-of-the-art, 300-kilowatt solar-powered processing facility operated by GreenWaste Recovery in central San Jose.

Recyclables are sorted and the remaining organic waste, including food, is then composted at the Z-Best facility in Gilroy.

After 10 months of operation, data shows that multifamily properties are now diverting nearly 80 percent of their waste from local landfills (54,000 tons annually), giving San Jose the best performing municipal multifamily recycling program in the nation. This equates to an annual greenhouse gas reduction of almost 50,000 metric tons of carbon dioxide – equivalent to removing 9,000 vehicles from the road.

The City of San Jose partnered with the local division of the California Apartment Association (CAA Tri-County), representing over 3,000 members.

“This is a win-win approach,” said Joshua Howard, CAA Tri-County Executive Director. “Rather than imposing mandates on local housing providers and residents, it taps ingenuity for a cleaner and greener solution. Of course, we will continue to work with rental property owners, managers, and their residents to encourage residential recycling so that it simply becomes part of the San Jose lifestyle.”

This addition to the city’s “Recycle Plus” program represents a major step towards achieving Zero Waste, one of the 10 ambitious goals of San Jose’s Green Vision, a comprehensive plan approved by the San Jose City Council in October 2007 and aimed at transforming the city into a leader in environmental innovation and sustainability.

In addition to the 65 employees at the GreenWaste facility, the new program is also assisting the City of San Jose in achieving its Green Vision goal of 25,000 “clean-tech” jobs by 2022 – an accomplishment of particular note given the current economic climate.

—Donna Perala is Residential Program Manager and Jeff Anderson is Residential Program Supervisor for San Jose’s multifamily housing recycling program.



DTV Conversion: Most Viewers Kept Their Old Television Sets

This summer's switch from analog to digital television signals failed to bring about a massive change in television sets owned by American viewers.

Many analysts, including some at the California Integrated Waste Management Board, had anticipated a surge in new digital television set purchases, along with a sharp upswing in the number of older analog sets being turned in for electronic waste recycling.

Yet most electronics retailers reported only a modest increase in sales, with Best Buy actually reporting an 8.8 percent drop in electronics sales, according to a report in the Wall Street Journal.

What factors minimized the anticipated upheaval among the television-viewing public? Rising unemployment and the nationwide recession combined to slow consumer spending. But an aggressive marketing campaign promoting set-top converter boxes minimized the inconvenience for those who receive their television signals over the air with roof-mounted or "rabbit ears" antennas.

Less than 20 percent of the viewing public was actually impacted by the digital television signal conversion. Those households subscribing to cable television or home satellite systems did not need to do anything at all because the new signals were received and converted at the station, or head-end, and then rebroadcast to users' existing sets.

Then nation's broadcasters did an excellent job of getting the word out to viewers more than a year in advance of the DTV conversion. They set up hotlines to disseminate information about the DTV switchover, and some even dispatched technicians to viewers' homes to hook up the converter boxes.

Nationwide, more than \$1.5 billion was spent purchasing set-top converter boxes, with most of the cost being offset through \$40 coupons issued by the federal government.

Nearly 1 million of the coupons were redeemed in the Los Angeles area alone. Bay Area viewers redeemed nearly 200,000 of the coupons, while more than 127,000 coupons were redeemed in the Sacramento/Stockton/Modesto viewing area.

In California, one of the Board's most successful waste-diversion programs is the Covered Electronic Waste payment system. Since the program began in January 2004, it has paid e-waste collectors to receive and recycle more than 620 million pounds of televisions, computer monitors, and other electronic products that contain hazardous components that must be kept out of landfills.



Environmental Education Update: Tugging on Our Universal Connection

John Muir captured why environmental education is crucial: “Tug on anything at all and you’ll find it connected to everything else in the universe.”

Imagine knowing that from kindergarten on.

When 2003 legislation created the Education and the Environment Initiative, or EEI, the California Environmental Protection Agency launched a new era of bringing environmental literacy to school children from kindergarten through high school in California. Just as knowing how to read went from a rarity to commonplace in our country, EEI aims to have the same effect on how children understand their interactions with the environment.

The Integrated Waste Management Board’s Office of Education and the Environment has the lead in producing this first-of-a kind curriculum.

The EEI Curriculum is unique by teaching science and history-social science content standards within an environmental context.

It takes no additional classroom time to introduce environmental awareness, build on it, and sustain it throughout a child’s education. The 85 lesson units are colorful and enticing, thanks in no small way to a partnership with National Geographic. Teaching methods are designed for maximum kid appeal.

EEI recently met two significant milestones. All 85 final draft curriculum units have been sent to State Board of Education approved independent reviewers. Their Report of Findings were to be shared with the Curriculum Development and Supplemental Materials Commission in September.

Simultaneously, the EEI Curriculum is posted for public review at <http://www.calepa.ca.gov/Education/EEI/Curriculum/>. It will be submitted to the State Board of Education for approval in January 2010.

The Office of Education and the Environment is now shifting to the outreach and training phase of the project, making sure all our direct and indirect customers—children, parents, and teachers—know EEI’s benefits.



Board Support Boosts Participation in Global Product Reuse Network

More than 3 million people have become recent devotees of a website that promotes the principle that “It’s better to give it away than to throw it away,” thanks to an innovative, two-year \$50,000 contract between the California Integrated Waste Management Board and the website sponsors.

Funding provided by the Board covered the cost of redesigning and expanding the website www.freecycle.org.

“We wanted to partner with Freecycle because of its passion for sustainability, and the platform it provides to trigger a shift from ‘throwaway’ to ‘giveaway,’ ” said Board Chair Margo Reid Brown. “Californians want to do the right thing and they want to protect our environment. We need to give them every opportunity possible to expand recycling and cut our reliance on landfills.”

The nonprofit group Freecycle Network, founded in 2003, operates the website, which is believed to represent the world’s largest reuse community. The site now has more than 7 million registered users, including 375,000 in California, and is signing up more than 45,000 new members weekly.

During the two-year partnership with the Board, Freecycle members gifted more than 825,000 items to other members of the online community. In the process they kept an estimated 26,000 tons of unwanted goods out of landfills by finding new owners for the materials.

Tucson-based Freecycle Network is global, but it’s also local. The Freecycle website utilizes volunteer moderators – more than 10,000 worldwide – in each of the communities where it maintains a membership presence. For example the 375,000 Californians who have joined Freecycle represent more than 230 communities across the state.

Freecycle’s motto is “Changing the world one gift at a time.” Its members are gifting more than 20,000 unwanted items every day, which is diverting an estimated 700 tons of materials daily from the world’s landfills.

In 2007, Yahoo ranked “Freecycle” as the third most-searched environmental term, ahead of “Earth” and “pollution.” Only the terms “global warming” and “recycling” generated a higher number of Yahoo searches that year.



California Integrated Waste Management Board

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